

**FINDINGS AND DETERMINATION OF THE COMMISSIONER  
PURSUANT TO [IC 13-14-9-8](#) AND DRAFT RULE  
LSA Document #20-449**

**ARCELORMITTAL AND NIPSCO SULFUR DIOXIDE EMISSION LIMIT REVISIONS****PURPOSE OF NOTICE**

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for amendments to [326 IAC 7-4-14](#), [326 IAC 7-4.1-10](#), and [326 IAC 7-4.1-11](#), concerning revisions to ArcelorMittal's sulfur dioxide (SO<sub>2</sub>) emission limits for three locations in Porter and Lake counties, and the removal of two emissions units at the Northern Indiana Public Service Company Bailly Station (NIPSCO) in Porter County that have been retired and taken out of NIPSCO's Title V permit. IDEM is soliciting written comment on the draft rule language and will schedule a public hearing before the Environmental Rules Board (board) for consideration of adoption of these rules.

**CITATIONS AFFECTED:** [326 IAC 7-4-14](#); [326 IAC 7-4.1-10](#); [326 IAC 7-4.1-11](#).

**AUTHORITY:** [IC 13-14-8](#); [IC 13-14-9](#); [IC 13-17-3](#).

**STATUTORY REQUIREMENTS**

[IC 13-14-9-8](#) recognizes that, under certain circumstances, it may be appropriate to reduce the number of public comment periods and public hearings usually provided for under the [IC 13-14-9](#) environmental rulemaking process. In cases where the commissioner determines that there is no reasonably anticipated benefit from a second public comment period and first public hearing to either the environment or persons regulated or otherwise affected by the draft rule, IDEM may forgo these comment periods and proceed directly to the public hearing and board meeting at which the draft rule is considered for adoption. Two opportunities for public comment (with this notice and at the public hearing prior to adoption of the rule) remain under this procedure.

If the commissioner makes the determination of no anticipated benefit required by [IC 13-14-9-8](#), the commissioner shall prepare written findings and publish those findings in the Indiana Register prior to the board meeting at which the draft rule is to be considered for adoption and include them in the board packet prepared for that meeting. This document constitutes the commissioner's written findings pursuant to [IC 13-14-9-8](#).

The statute provides for this shortened rulemaking process if the commissioner determines that:

(1) the rule constitutes:

(A) an adoption or incorporation by reference of a federal law, regulation, or rule that:

(i) is or will be applicable to Indiana; and

(ii) contains no amendments that have a substantive effect on the scope or intended application of the federal law or rule;

(B) a technical amendment with no substantive effect on an existing Indiana rule; or

(C) an amendment to an existing Indiana rule, the primary and intended purpose of which is to clarify the existing rule; and

(2) the rule is of such nature and scope that there is no reasonably anticipated benefit to the environment or the persons referred to in [IC 13-14-9-7](#)(a)(2) from:

(A) exposing the rule to diverse public comment under [IC 13-14-9-3](#) or [IC 13-14-9-4](#);

(B) affording interested or affected parties the opportunity to be heard under [IC 13-14-9-3](#) or [IC 13-14-9-4](#); and

(C) affording interested or affected parties the opportunity to develop evidence in the record collected under [IC 13-14-9-3](#) and [IC 13-14-9-4](#).

**BACKGROUND**

This rulemaking incorporates revisions to the SO<sub>2</sub> limits contained in [326 IAC 7-4-14](#), [326 IAC 7-4.1-10](#), and [326 IAC 7-4.1-11](#) for emissions units at three ArcelorMittal steel mills, and removes alternative SO<sub>2</sub> limits and emissions units that have been permanently shut down within the facility. This rule is the result of both a settlement agreement and a consent decree between ArcelorMittal, IDEM, and the United States Environmental Protection Agency (U.S. EPA).

The settlement agreement between the parties was filed in the United States Court of Appeals for the Seventh Circuit, Appeal No. 14-1412, on November 12, 2019. The settlement agreement implements a site-specific revision to the ArcelorMittal Burns Harbor LLC SO<sub>2</sub> emission limits at [326 IAC 7-4-14](#), by making revisions to certain SO<sub>2</sub> limits and adding a specified blast furnace gas sampling and analysis protocol. Additional revisions to the SO<sub>2</sub> emission limits include establishing current limits for the Blast Furnace Flare and listing

several emissions units as permanently shut down within the facility. These updates to [326 IAC 7-4-14](#) and the addition of the blast furnace gas testing protocol will satisfy the terms of the settlement agreement.

The consent decree between the parties was filed in the United States District Court for the Northern District of Indiana, Hammond Division, on April 1, 2020. The consent decree revises ArcelorMittal's SO<sub>2</sub> limits for Indiana Harbor West at [326 IAC 7-4.1-10](#), and Indiana Harbor East at [326 IAC 7-4.1-11](#), in Lake County<sup>2</sup>. Specific changes to these facilities include revising furnaces at Indiana Harbor West as burning natural gas only, and revising the No. 7 furnace interim and final SO<sub>2</sub> limits at Indiana Harbor East, as well as revising the calculation for the hourly SO<sub>2</sub> emission rate. The adoption of the revised SO<sub>2</sub> emission limits for these two facilities, as well as the revised SO<sub>2</sub> hourly emission rate for Indiana Harbor East, will satisfy the terms of the consent decree.

In addition to amending the SO<sub>2</sub> emission limits for the ArcelorMittal settlement agreement and consent decree, IDEM is removing boilers 7 and 8 at [326 IAC 7-4-14](#) for NIPSCO, to reflect that these boilers have been permanently retired and taken out of the facility's Title V permit.

#### **[IC 13-14-9-4](#) Identification of Restrictions and Requirements Not Imposed under Federal Law**

No element of the draft rule imposes either a restriction or a requirement on persons to whom the draft rule applies that is not imposed under federal law. This draft rule imposes no restrictions or requirements because it is a technical amendment with no substantive effect on an existing Indiana rule.

#### **Potential Fiscal Impact**

There is no fiscal impact associated with this rulemaking for the state, ArcelorMittal, or NIPSCO. Updates to the SO<sub>2</sub> emission limits for ArcelorMittal at [326 IAC 7-4-14](#), [326 IAC 7-4.1-10](#), and [326 IAC 7-4.1-11](#) are technical amendments that satisfy the terms of the consent decree between the source, IDEM, and U.S. EPA. The revision to [326 IAC 7-4-14](#) for NIPSCO is an administrative change to remove retired equipment.

#### **Public Participation and Work Group Information**

At this time, no work group is planned for the rulemaking. If you feel that a work group or other informal discussion on the rule is appropriate, please contact Keelyn Walsh, Rules Development Branch, Office of Legal Counsel at (317) 232-8229 or (800) 451-6027 (in Indiana).

#### **Small Business Assistance Information**

IDEM established a compliance and technical assistance program (CTAP) under [IC 13-28-3](#). The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with [IC 13-28-3](#) and [IC 13-28-5](#), there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on CTAP and other resources available can be found at:

[www.in.gov/idem/ctap](http://www.in.gov/idem/ctap)

For purposes of [IC 4-22-2-28.1](#), small businesses affected by this rulemaking may contact the Small Business Regulatory Coordinator:

Angela Taylor  
IDEM Small Business Regulatory Coordinator/CTAP Small Business Liaison  
IGCN 1316  
100 North Senate Avenue  
Indianapolis, IN 46204-2251  
(317) 233-0572 or (800) 988-7901  
[ctap@idem.in.gov](mailto:ctap@idem.in.gov)

For purposes of [IC 4-22-2-28.1](#), the Small Business Ombudsman designated by [IC 5-28-17-6](#) is:

Katelyn Colclazier  
Small Business Ombudsman  
Indiana Economic Development Corporation  
One North Capitol, Suite 700  
Indianapolis, IN 46204  
(317) 431-1560  
[kcolclazier@iedc.in.gov](mailto:kcolclazier@iedc.in.gov)

Resources available to regulated entities through the small business ombudsman include the ombudsman's duties stated in [IC 5-28-17-6](#), specifically [IC 5-28-17-6\(9\)](#), investigating and attempting to resolve any matter regarding compliance by a small business with a law, rule, or policy administered by a state agency, either as a party to a proceeding or as a mediator.

The Small Business Assistance Program Ombudsman is:

Erin Moorhous  
IDEM Small Business Assistance Program Ombudsman/Business, Agricultural, and Legislative Liaison  
IGCN 1301  
100 North Senate Avenue  
Indianapolis, IN 46204-2251  
(317) 232-8921 or (800) 451-6027  
[emoorhous@idem.in.gov](mailto:emoorhous@idem.in.gov)

## FINDINGS

The commissioner of IDEM has prepared findings regarding rulemaking on amendments to [326 IAC 7-4-14](#), [326 IAC 7-4.1-10](#), and [326 IAC 7-4.1-11](#). These findings are prepared under [IC 13-14-9-8](#) and are as follows:

- (1) This rule is a technical amendment with no substantive effect on an existing Indiana rule.
- (2) The environment and persons regulated or otherwise affected by the draft rule will benefit from prompt adoption of this rule, because it satisfies the legal requirements of the settlement agreement and consent decree between the parties by updating the SO<sub>2</sub> emission limits for three ArcelorMittal facilities.
- (3) The proposed changes to the rule language for NIPSCO only remove retired equipment at the facility that has been taken out of the facility's Title V permit.
- (4) I have determined that, under the specific circumstances pertaining to this rule, there would be no reasonably anticipated benefit to the environment or to persons regulated or otherwise affected by the draft rule from the first or second written comment period under [IC 13-14-9-3](#) or [IC 13-14-9-4](#), or from the first public hearing under [IC 13-14-9-5\(a\)\(1\)](#).
- (5) The draft rule is hereby incorporated into these findings.

Bruno L. Pigott  
Commissioner  
Indiana Department of Environmental Management

## REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Comments may be submitted in one of the following ways:

- (1) By mail or common carrier to the following address:  
LSA Document #20-449 ArcelorMittal and NIPSCO SO<sub>2</sub> Revisions  
Keelyn Walsh  
Rules Development Branch  
Office of Legal Counsel  
Indiana Department of Environmental Management  
Indiana Government Center North  
100 North Senate Avenue  
Indianapolis, IN 46204-2251
- (2) By facsimile to (317) 233-5970. Please confirm the timely receipt of your faxed comments by calling the Rules Development Branch at (317) 232-8922.
- (3) By electronic mail to [kwalsh@idem.in.gov](mailto:kwalsh@idem.in.gov). To confirm timely delivery of submitted comments, please request a document receipt when sending the electronic mail. **PLEASE NOTE: Electronic mail comments will NOT be considered part of the official written comment period unless they are sent to the address indicated in this notice.**
- (4) Hand delivered to the receptionist on duty at the thirteenth floor reception desk, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana.

Regardless of the delivery method used, to properly identify each comment with the rulemaking action it is intended to address, each comment document must clearly specify the LSA document number of the rulemaking.

## COMMENT PERIOD DEADLINE

All comments must be postmarked, faxed, or time stamped not later than October 2, 2020. Hand-delivered comments must be delivered to the appropriate office by 4:45 p.m. on the above-listed deadline date.

Additional information regarding this action may be obtained from Keelyn Walsh, Rules Development Branch, Office of Legal Counsel, (317) 232-8229 or (800) 451-6027 (in Indiana).

## DRAFT RULE

SECTION 1. [326 IAC 7-4-14](#) IS AMENDED TO READ AS FOLLOWS:

### [326 IAC 7-4-14](#) Porter County sulfur dioxide emission limitations

Authority: [IC 13-14-8](#); [IC 13-17](#)

Affected: [IC 13-15](#)

Sec. 14. The following sources and facilities **emissions units** located in Porter County shall comply with the sulfur dioxide emission limitations in pounds per million Btu (lbs/MMBtu) and pounds per hour (lbs/hr), unless

otherwise specified, and other requirements:

(1) ArcelorMittal Burns Harbor LLC, **Source Identification Number 127-00001**, shall comply with the following:

(A) The following ~~facilities shall~~ **emissions units must** burn natural gas only:

- (i) BOF Shop FM Boiler.
- (ii) 160 inch Plate Mill Continuous Hardening and Annealing Heat Treatment Furnace.
- (iii) 160 inch Plate Mill Boilers No. 2 and 4.
- (iv) Batch Annealing Furnaces (24).
- (v) Continuous Heat Treat Line – Preheat, Heating and Soaking, and Reheat.

(B) The following ~~facilities shall~~ **emissions units must** comply with the sulfur dioxide emission limitations and other requirements:

Facility Description	Emission Limitations	
	lbs/MMBtu	lbs/hr
(i) Blast Furnace C Stoves	0.83	545
(ii) Blast Furnace D Stoves	0.83	545
(iii) Sinter Plant Windbox	1.0 pound per ton process material	400
(iv) No. 1 Coke Battery Underfire	1.73	803
(v) No. 2 Coke Battery Underfire	1.96	911
<del>(vi) Slab Mill Soaking Pits:</del>		
<del>(AA) Not more than nine (9) of thirty two (32) horizontally discharged soaking pits may be fired on coke oven gas at the same time with total sulfur dioxide emissions not to exceed four hundred eighty two (482) pounds per hour.</del>		
<del>(BB) The remaining twenty three (23) of thirty two (32) horizontally discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed twenty four (24) pounds per hour.</del>		
<del>(CC) The four (4) vertically discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed four (4) pounds per hour.</del>		
<del>(vii) (vi)</del> 160 inch Plate Mill Continuous Reheat Furnace No. 1 and Boiler No. 1	1.96	299 <b>29.9</b>
<del>(viii) (vii)</del> 160 inch Plate Mill Continuous Reheat Furnace No. 2 and Boiler No. 3	1.96	299
<del>(ix) (viii)</del> 80 inch Hot Strip Mill Furnace No. 1, 2, and 3	1.96	79 each
<del>(x) (ix)</del> 110 inch Plate Mill Furnaces No. 1 and 2	1.96	<b>441 44.1</b>
<del>(xi) (x)</del> 110 inch Plate Mill Normalizing Furnace	1.07	88
<del>(xii) (xi)</del> 160 inch Plate Mill I & O Furnaces No. 4 and 5	1.96	<b>274 27.4</b>
<del>(xiii) (xii)</del> 160 inch Plate Mill I & O Furnaces No. 6 and 7	1.96	<b>274 27.4</b>
<del>(xiv) 160 inch Plate Mill I &amp; O Furnace No. 8</del>	<del>1.96</del>	<del>176</del>
<del>(xv) (xiii)</del> Power Station Boiler No. 7	0.8	520
<del>(xvi) (xiv)</del> Power Station Boilers No. 8, 9, 10, 11, and 12	1.45	<del>2,798</del> <b>2,378</b>
<b>(xv) Blast Furnace Gas Flare</b>	<b>0.50</b>	<b>N/A</b>

~~(C) As an alternative to the sulfur dioxide emission limitations specified in clause (B), ArcelorMittal Burns Harbor LLC shall comply with the sulfur dioxide emission limitations and other requirements as follows:~~

Facility Description	Emission Limitations	
	lbs/MMBtu	lbs/hr
<del>(i) Blast Furnace C Stoves</del>	<del>0.75</del>	<del>498</del>
<del>(ii) Blast Furnace D Stoves</del>	<del>0.75</del>	<del>498</del>
<del>(iii) Sinter Plant Windbox</del>	<del>1.0 pound per ton process material</del>	<del>400</del>
<del>(iv) No. 1 Coke Battery Underfire</del>	<del>1.57</del>	<del>730</del>
<del>(v) No. 2 Coke Battery Underfire</del>	<del>1.78</del>	<del>828</del>
<del>(vi) Slab Mill Soaking Pits:</del>		
<del>(AA) Not more than six (6) of thirty two (32) horizontally discharged soaking pits may be fired on coke oven gas at the same time with total sulfur dioxide emissions not to exceed two hundred ninety two (292) pounds per hour.</del>		

~~(BB) The remaining twenty-six (26) of thirty-two (32) horizontally discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed twenty-seven (27) pounds per hour.~~

~~(CC) The four (4) vertically discharged soaking pits may burn blast furnace or natural gas, or both, with total sulfur dioxide emissions not to exceed four (4) pounds per hour.~~

(vii) 160 inch Plate Mill Continuous Reheat Furnace No. 1 and Boiler No. 1	1.78	293
(viii) 160 inch Plate Mill Continuous Reheat Furnace No. 2 and Boiler No. 3	1.78	293
(ix) 80 inch Hot Strip Mill Furnace No. 1, 2, and 3	1.78	483 each
(x) 110 inch Plate Mill Furnaces No. 1 and 2	1.78	401
(xi) 110 inch Plate Mill Normalizing Furnace	1.07	88
(xii) 160 inch Plate Mill I & O Furnaces No. 4 and 5	1.78	249
If 160 inch Plate Mill I & O Furnaces No. 6 or 7, or both, are in operation on a fuel other than natural gas, Furnaces No. 4 and 5 shall not operate or shall burn natural gas only.		
(xiii) 160 inch Plate Mill I & O Furnaces No. 6 and 7	1.78	249
If 160 inch Plate Mill I & O Furnaces No. 4 or 5, or both, are in operation on a fuel other than natural gas, Furnaces No. 6 and 7 shall not operate or shall burn natural gas only.		
(xiv) 160 inch Plate Mill I & O Furnace No. 8	1.78	160
(xv) Power Station Boilers No. 7	0.8	520
(xvi) Power Station Boilers No. 8, 9, 10, 11, and 12	1.45 total	2,500 total

~~(xvii) ArcelorMittal Burns Harbor LLC shall notify the department at least twenty-four (24) hours prior to reliance on the alternative set of limits specified in items (i) through (xvi). ArcelorMittal Burns Harbor LLC shall maintain records of fuel type and operational status of facilities listed in items (xii) and (xiii) and shall make the records available to the department upon request.~~

~~(xviii) For the purposes of [326 IAC 7-2-1\(c\)\(2\)](#), compliance shall be determined based on separate calendar month averages for the set of requirements specified in this clause and for the set of requirements specified in clause (B).~~

~~(D) (C) Coke oven gas usage at facilities **emissions units** other than the No. 1 and 2 Coke Battery Underfire Stacks shall be **are** restricted to not more than seventy-five (75) million cubic feet per day. Total sulfur dioxide emissions from the facilities listed in clause (B)(i) through (B)(iii), (B)(vi)(AA) through (B)(vi)(BB), (B)(vii) through (B)(x), (B)(vi) through (B)(ix), and (B)(xii) through (B)(xvi) shall (B)(xi) through (B)(xiv) must not exceed four thousand four hundred twenty-nine (4,429) pounds per hour. During periods in which the limits contained in clause (C) are in effect, coke oven gas usage at facilities other than the No. 1 and 2 Coke Battery Underfire Stacks shall be restricted to not more than seventy (70) million cubic feet per day, and total sulfur dioxide emissions from the facilities listed in clause (C)(i) through (C)(iii), (C)(vi)(AA) through (C)(vi)(BB), (C)(vii) through (C)(x), and (C)(xii) through (C)(xvi) shall not exceed four thousand six hundred thirty (4,630) pounds per hour.~~

~~(E) (D) ArcelorMittal Burns Harbor LLC shall achieve compliance **comply** with the requirements specified in clause (B) or (C) prior to December 31, 1988. Thereafter, ArcelorMittal Burns Harbor LLC shall submit a report to the department within thirty (30) days following the end of each calendar quarter containing the following information:~~

~~(i) Records of the total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at each facility **emissions unit** listed in clauses **clause** (B). and (C).~~

~~(ii) Records of the~~

~~(AA) average sulfur content and heating value as determined per the procedures specified in clause (F) (E) for each fuel type used during the calendar quarter. and~~

~~(BB) maximum number of slab mill soaking pits burning coke oven gas at any given time during each day.~~

~~(iii) The calculated sulfur dioxide emission rate in the applicable emission units (pounds per hour, pounds per million Btu, or pounds per ton) for each facility for each day and the average sulfur dioxide emissions from the facilities listed in clause (C)(i) through (C)(iii), (C)(vi)(AA) through (C)(vi)(BB), (C)(vii) through (C)(x), and (C)(xii) through (C)(xvi) for each day in pounds per hour during the calendar quarter.~~

~~(F) (E) Except for sampling and analysis of blast furnace gas that is subject to the protocol in clause (G), ArcelorMittal Burns Harbor LLC shall submit a sampling and analysis protocol to the department by December 31, 1988. The protocol shall **must**:~~

~~(i) contain a description of planned procedures for:~~

~~(AA) sampling of sulfur-bearing fuels and materials;~~

~~(BB) analysis of the sulfur content; and~~

~~(CC) any planned direct measurement of sulfur dioxide emissions vented to the atmosphere; and~~

~~(ii) specify the frequency of sampling, analysis, and measurement for each:~~



- (AA) fuel and material; and  
 (BB) facility. **emissions unit.**

The department shall incorporate the protocol into the source's operation permit per procedures specified in [326 IAC 2](#). The department may revise the protocol as necessary to establish acceptable sampling, analysis, and measurements procedures and frequency. The department may also require that a source conduct a stack test at any facility **emissions unit** listed in this subdivision within thirty (30) days of written notification by the department.

**(F) The following emissions units have been permanently shut down:**

**(i) The following Slab Mill Soaking Pits:**

- (AA) Set of nine (9) Coke Oven Gas-Fueled, Horizontally- Discharged Slab Mill Soaking Pits.  
 (BB) Set of twenty-three (23) Blast Furnace and Natural Gas-Fired, Horizontally-Discharged Slab Mill Soaking Pits.  
 (CC) Set of four (4) Blast Furnace and Natural Gas-Fired, Vertically-Discharged Slab Mill Soaking Pits.

**(ii) 160 inch Plate Mill I & O Furnace No. 8.**

**(G) ArcelorMittal Burns Harbor LLC shall comply with the following blast furnace gas testing protocol:**

- (i) Conduct blast furnace gas (BFG) fuel sampling at a representative location downstream of the gas cleaning system of Blast Furnaces C and D.  
 (ii) Have the fuel sample analyzed for the following:  
 (AA) Btu content in accordance with ASTM D 3588.  
 (BB) Fuel composition analysis in accordance with ASTM D 1946.  
 (CC) Fuel sulfur analysis in accordance with ASTM D 6228.  
 (iii) Conduct BFG sampling:  
 (AA) on a quarterly basis; and  
 (BB) during representative performance of each blast furnace operating during the quarter (i.e., performance based on normal operating conditions).  
 (iv) Determine compliance by the average of at least three (3) one (1) hour integrated samples during the quarter.  
 (v) Fuel samples must either be:  
 (AA) collected in silonite-coated evacuated cylinders; or  
 (BB) analyzed within twelve (12) hours of being collected.  
 (vi) The following calculation methodology will be utilized:

$$E_{lb/mmBtu} = C_{gr/dscf} \left( \frac{1 \text{ lb } S}{7000 \text{ gr}} \right) \left( \frac{1 \text{ lb-mol } S}{32 \text{ lb } S} \right) \left( \frac{1 \text{ lb-mol } SO_2}{1 \text{ lb-mol } S} \right) \left( \frac{64 \text{ lb } SO_2}{1 \text{ lb-mol } SO_2} \right) F_d$$

Where:  $E_{lb/mmBtu}$  = The emission rate in units of the standard in pounds per one million (1,000,000) British thermal units (lb/MMBtu).

$C_{gr/dscf}$  = The sulfur concentration, as measured by ASTM D 6228 in units of grains per dry standard cubic feet.

$\text{mol } S$  = Molar mass of sulfur.

$\text{mol } SO_2$  = Molar mass of sulfur dioxide.

$F_d$  = Volume of combustion components per unit of heat content in units of standard cubic feet per one million (1,000,000) British thermal units (scf/MMBtu).

$$F_d = 10^6 \frac{[3.65(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)]}{GHV}$$

Where:  $F_d$  = Volume of combustion components per unit of heat content in units of scf/mmBTU.

$\%H$  = Concentration of hydrogen from ultimate analysis of fuel, weight percent.

$\%C$  = Concentration of carbon from ultimate analysis of fuel, weight percent.

$\%S$  = Sulfur content of as-fired fuel, dry basis, weight percent.

$\%N$  = Concentration of nitrogen from ultimate analysis of fuel, weight percent.

%O = Concentration of oxygen from ultimate analysis of fuel, weight percent.

GHV = Gross calorific value of the fuel determined by ASTM D 3588, Btu/lb.

The equation presumes that sulfur concentration will be measured in gr/dscf. If sulfur is measured in parts per million (ppm), the equation will require an adjustment using standard temperature and pressure (STP) defined as sixty-eight (68) degrees Fahrenheit and one (1) standard atmosphere (atm).

(vii) ArcelorMittal Burns Harbor may request the department and U.S. EPA approval of an alternative sampling or analysis methodology or alternative sampling frequency that is of equivalent accuracy as those specified in this protocol. If approved by the department and U.S. EPA, ArcelorMittal Burns Harbor may utilize the approved alternative methodology or alternative sampling frequency to demonstrate compliance with the applicable emission limits in [326 IAC 7-4-14](#).

(2) Northern Indiana Public Service Company Bailly Station shall comply with the following:

Facility Description	Emission Limitations lbs/MMBtu
(A) Boilers 7 and 8	6.0 each
Boilers 7 and 8 shall be fired with coal, fuel oil, or natural gas.	
(B) Gas Turbine 10	natural gas only

(3) Midwest Steel shall comply with the following:

Facility Description	Emission Limitations lbs/MMBtu
Babcock and Wilcox Boiler 1 and Erie City Boilers No. 1, 2, and 3	1.33 each
Only two (2) of four (4) boilers may burn fuel oil with a sulfur dioxide emission rate greater than three-tenths (0.3) pounds per million Btu at the same time. Midwest Steel shall maintain records of fuel type for each boiler for each hour. The records of fuel type shall be made available to the department upon request.	

(4) Air Products and Chemical shall comply with the following:

Facility Description	Emission Limitations
All boilers and the No. 3 Hydrogen Reformer	natural gas only

(Air Pollution Control Division; [326 IAC 7-4-14](#); filed Aug 28, 1990, 4:50 p.m.: 14 IR 78; readopted filed Jan 10, 2001, 3:20 p.m.: 24 IR 1477; errata filed Dec 12, 2002, 3:35 p.m.: 26 IR 1568; filed Sep 29, 2009, 3:00 p.m.: [20091028-IR-326070088FRA](#))

SECTION 2. [326 IAC 7-4.1-10](#) IS AMENDED TO READ AS FOLLOWS:

### [326 IAC 7-4.1-10](#) ArcelorMittal USA LLC (Indiana Harbor West) sulfur dioxide emission limitations

Authority: [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

Affected: [IC 13-15](#); [IC 13-17](#)

Sec. 10. (a) ~~ISG~~ **ArcelorMittal USA LLC (Indiana Harbor West)**, Source Identification Number 00318, shall comply with the sulfur dioxide emission limits in pounds per million British thermal units (MMBtu), pounds per hour, and other requirements as follows:

Emissions Unit Description	Emission Limit lbs/MMBtu	Emission Limit lbs/hour
(1) Utility Boilers 5, 6, 7, and 8:	0.594 each	1456.5 total
(A) Total actual heat input from fuel oil usage at all boilers combined <del>shall</del> <b>must</b> not exceed two thousand four hundred fifty-two (2,452) MMBtu per hour.		
(B) Boilers <del>shall</del> <b>must</b> be fired on fuel oil, blast furnace gas, and natural gas only.		
(C) Fuel oil burned <del>shall</del> <b>must</b> not exceed one and three-tenths percent (1.3%) sulfur and one and thirty-five hundredths (1.35) pounds per MMBtu.		
(D) Utility Boilers 5, 6, 7, and 8 in combination with the Ironside Energy, LLC Utility Boiler No. 9 are limited to an annual operating limit of five thousand eight hundred seventy-one and sixty-one hundredths (5,871.61) tons per year.		

(2) Hot Strip Mill Slab Heat Reheat Furnaces 1, 2, and 3	1.254 each	535.1 each
(3) Sinter Plant Windbox		240
(4) (2) Blast Furnace Stoves:		
(A) No. 3 Blast Furnace Stove	0.290	127.89
(B) No. 4 Blast Furnace Stove	0.290	140.94
(5) (3) Reladling and Desulfurization Baghouse	0.057 pounds per ton feed material	30.40
(6) (4) Number 4 Blast Furnace EC Baghouse	0.18 pounds per ton feed material	69.9

(b) ~~ISG ArcelorMittal USA LLC~~ (Indiana Harbor ~~Inc.~~ **West**) shall:

(1) maintain records of the:

(A) total coke oven gas, blast furnace gas, fuel oil, and natural gas usage for each day at each emissions unit listed in subsection (a)(1) through ~~(a)(4)~~; **(a)(2)**; and

(B) average sulfur content and heating value for each day for each fuel type used during the calendar quarter; and

(2) submit to the department within thirty (30) days of the end of each calendar quarter the calculated sulfur dioxide emission rate in pounds per MMBtu for each emissions unit for each day during the calendar quarter and the total fuel usage for each type at each emissions unit for each day.

(Air Pollution Control Division; [326 IAC 7-4.1-10](#); filed May 25, 2005, 10:50 a.m.: 28 IR 2958)

SECTION 3. [326 IAC 7-4.1-11](#) IS AMENDED TO READ AS FOLLOWS:

**[326 IAC 7-4.1-11](#) ArcelorMittal USA LLC (Indiana Harbor East) sulfur dioxide emission limitations**

**Authority:** [IC 13-14-8](#); [IC 13-17-3-4](#); [IC 13-17-3-11](#)

**Affected:** [IC 13-15](#); [IC 13-17](#)

Sec. 11. (a) ~~Ispat Inland Inc.~~ **ArcelorMittal USA LLC (Indiana Harbor East)**, Source Identification Number 00316, shall comply with the sulfur dioxide emission limits in pounds per million British thermal units (MMBtu), pounds per ton, pounds per hour, and other requirements as follows:

Emissions Unit Description	Emission Limit lbs/MMBtu	Emission Limit lbs/hour
(1) No. 1 Blast Furnace Stoves	0.080 total	41.92 total
(2) No. 2 Blast Furnace Stoves	0.080 total	42.4 total
(3) No. 5 and 6 Blast Furnace Stoves	0.140 each	41.02 each
(4) (1) No. 7 Blast Furnace Stoves	0.195 total	162 total
(5) (2) No. 5 Boilerhouse	0.198	265.2
(6) No. 2AC Boilers 207, 208, 209, and 210		15.873 total
(7) No. 2AC Boilers 211, 212, and 213	0.140 each	168.0 total
(8) No. 4AC Boilers 401, 402, 403, 404, and 405:		890.23 total
(A) Stack 1 (Boilers 401 and 402) and Stack 2 (Boilers 403 and 404)	1.5 per stack	
(B) Stack 3 (Boiler 405)	1.0	
(C) Sulfur dioxide emissions from Stacks 1, 2, and 3 shall be limited in accordance with the following equation in units of pounds per MMBtu:		

$$(\text{Stack 1} + \text{Stack 2})/2 + 0.425 \times \text{Stack 3} \leq 1.6$$

If any one (1) of Boilers 401 through 405 is not operating for a given calendar day, the pounds per MMBtu for Stack 3 for the purposes of the equation in this clause is twenty four hundredths (0.24) pounds per MMBtu.

(D) ~~Ispat Inland Inc.~~ shall maintain and operate sulfur dioxide continuous emission monitoring systems (CEMS) in Stacks 1, 2, and 3. CEMS data shall be used to determine compliance and to determine the sulfur dioxide emission rate in pounds per MMBtu for



~~the report required under subsection (b)(3). The CEMS shall be operated in accordance with the procedures specified in [326 IAC 3-5](#), and records of hourly emissions data shall be maintained and made available to the department upon request.~~

<del>(9)</del> <b>(3)</b> Lime Plant Kiln Baghouse Stacks	0.460	32.08 total
<del>(10)</del> Anneal 3, 4	0.000	0.000
	Emission Limit lbs/ton	Emission Limit lbs/hour
<del>(11)</del> EAF Shop Ladle Metal Baghouse	0.125	13.90
<del>(12)</del> <b>(4)</b> Pigging Ladle Facility	0.020	4.000
<del>(13)</del> <b>(5)</b> Sinter Plant Windbox		180.000
<del>(14)</del> <b>(6)</b> No. 7 Blast Furnace Canopy <b>West Baghouse and East Baghouse</b>	0.220	<b>50.400 432 total</b>
<del>(15)</del> No. 7 BF Casthouse Baghouse	0.220	50.400
<del>(16)</del> <b>(7)</b> No. 2 BOF Secondary Vent Stack	0.014	6.440
<del>(17)</del> <b>(8)</b> No. 2 BOF Charge Aisle and HMS Baghouse	0.151	69.460
<del>(18)</del> <b>(9)</b> No. 2 BOF Ladle Metal Baghouse	0.025	11.500
<del>(19)</del> <b>(10)</b> No. 4 BOF HMS Baghouse S and N	0.151 each	36.391 each
<del>(20)</del> <b>(11)</b> No. 4 BOF Secondary Vent Stack	0.001	0.535

(b) ~~Ispat Inland Inc.~~ **ArcelorMittal USA LLC (Indiana Harbor East)** shall:

(1) maintain records of the:

(A) total blast furnace gas, fuel oil, and natural gas usage for each day at each emissions unit listed in this section; and

(B) average sulfur content and heating value for each day for each fuel type used during the calendar quarter; and ~~of the operational status of 2AG Station Boilers 207, 208, 209, 210, 211, 212, and 213, 4AG Station Boilers 401, 402, 403, 404, and 405; and~~

**(C) hourly sulfur dioxide emission rate in pounds of sulfur dioxide per hour calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by twenty-four (24) hours; and**

**(D) hourly sulfur dioxide emission rate in pounds of sulfur dioxide per MMBtu or per ton for emissions units with a pounds of sulfur dioxide per MMBtu limit in this rule calculated by dividing the total daily sulfur dioxide emissions in pounds of sulfur dioxide per day by the total heat input per day in MMBtu or by the total tons per day, respectively; and**

(2) submit to the department within thirty (30) days of the end of each calendar quarter the calculated sulfur dioxide emission rate in pounds per million Btu and pounds per hour for each emissions unit for each day during the calendar quarter, the total fuel usage for each type of fuel used at each emissions unit for each day.

(Air Pollution Control Division; [326 IAC 7-4.1-11](#); filed May 25, 2005, 10:50 a.m.: 28 IR 2958)

### [Notice of Public Hearing](#)

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